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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,149	01/23/2001	Tomohiro Kusanagi	OSP-10029	1399
466	7590	10/05/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			CHOW, DOON Y	
			ART UNIT	PAPER NUMBER
			2675	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/767,149	Applicant(s) KUSANAGI, TOMOHIRO	
	Examiner Dennis-Doon Chow	Art Unit 2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 and 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasui et al. (5248963) in view of Kaneda (JP 11271715).

Yasui discloses a liquid crystal display device comprising: pixel electrodes; common electrode; a plurality of data lines and gate lines; plurality of switches; and a controller for detecting the power supply of the liquid crystal display device is turned off and outputting signals to a gate line driver to make all the gate lines active for a predetermined time to erase the display device (see abstract). Yasui further discloses the predetermined time is determined based on a time constant of a resistor and a capacitor (see col. 5, lines 8-50)

Yasui does not explicitly disclose detecting an absence of a video signal or a sync signal. Instead, Yasui discloses detecting the absence of the power signal.

Kaneda discloses a liquid crystal display device comprising a controller for detecting an absence of a reference clock signal CK which generates a level clock signal CPH, a level start signal STH, a perpendicular clock signal CPV and a perpendicular start signal STV (horizontal sync signal, and vertical sync signal). Kaneda further discloses absence of other input signals can be detected (see page 4/5, lines 9-10 of paragraph 8 of the English translation). The other input

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signals obviously can include a video signal. Kaneda further discloses outputting a potential voltage to a common electrode and data line based upon a detection signal.

Thus, it would have been obvious to one ordinary skill in the art to use Kaneda's controller in Yasui's device because of the same reason as Kaneda uses in his invention, which is to secure the excellent display quality of the display device for a long period of time (see Kaneda's abstract).

3. Claims 1-2 and 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasui et al. (5248963) in view of Takase et al. (6504534).

Yasui discloses a liquid crystal display device comprising: pixel electrodes; common electrode; a plurality of data lines and gate lines; plurality of switches; and a controller for detecting the power supply of the liquid crystal display device is turned off and outputting signals to a gate line driver to make all the gate lines active for a predetermined time to erase the display device (see abstract). Yasui further discloses the predetermined time is determined based on a time constant of a resistor and a capacitor (see col. 5, lines 8-50)

Yasui differs from the claims in that Yasui does not disclose detecting an absence of a video signal or a sync signal.

Takase discloses a detection means for detecting an absence of a video signal or a sync signal and outputting a control signal to turn off a power supply of a display device automatically based upon a detected signal so that power consumption can be reduced.

In light of Takase, it would have been obvious to one of ordinary skill in the art to use Takase's detection means in Yasui's display device to turn off the power supply automatically when the display device is not in used so that power consumption can be reduced.

Response to Arguments

4. Applicant's arguments filed 8/12/04 have been fully considered but they are not persuasive.

Applicant argues that Yasui does not disclose determining the (1) and (2) features based on a time constant of a resistor and a capacitor. Examiner disagrees with applicant's arguments because Yasui clearly teaches a time constant of a resistor and a capacitor. See col. 5, lines 8-50. In col. 5, lines 8-50, Yasui states "... a large time constant $C_{22}RL$ (where C_{22} is the capacitance of the capacitor 22b and RL is the load resistance of the power holding circuit 22) ... The pulse width T of the output clear signal CL from the inverter 27 is set to a value a little greater than the time during which the voltages E_1 , E_2 , V_1 and V_3 supplied to the liquid crystal display panel drop to the common potential when the power supply is turned OFF. That is, $T > (t_3 - t_1)$ ".

As to applicant's agreements with regarding to detecting a video signal or a vertical synchronization signal, see the above rejections.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 703-305-4398. The examiner can normally be reached on 8:30-6:00, Alternate Monday off.

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The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

D. Chow
September 30, 2004


DENNIS-DOON CHOW
PRIMARY EXAMINER